

REMARKS

Claims 1-70 were pending in the application at the time the present Office Action was mailed, claims 14-70 having been withdrawn from consideration pursuant to an earlier Restriction Requirement. In the present response, claims 2-4 have been amended, claims 9 and 10 have been withdrawn, new claims 71-77 have been added, and claims 14-70 have been cancelled without prejudice. Accordingly, claims 1-13 and 71-77 are now pending in the present application.

Claims 1-8 and 11-13 were rejected in the present Office Action. More specifically, the status of the claims in view of the present Office Action is as follows:

- (A) Applicant was advised to withdraw claims 9 and 10;
- (B) Claims 2 and 3 were objected to for informalities;
- (C) Claim 4 was rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention; and
- (D) Claims 1-8 and 11-13 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,936,318 to Weiler et al. ("Weiler").

The undersigned attorney wishes to thank the Examiner for engaging in a telephone conference on June 29, 2006, to discuss the present Office Action. During the course of the telephone conference, the parties discussed various aspects of the pending claims in view of the Weiler reference. The following remarks summarize the points discussed during the June 29 telephone conference.

A. Withdrawal of claims 9 and 10

The Office Action contends that claims 9 and 10 do not fall within the species elected in the earlier Restriction Requirement. Claims 9 and 10 have been withdrawn without commenting on the merits of this contention.

B. Response to the Objections to Claims 2 and 3

Claims 2 and 3 were objected to for informalities. Claims 2 and 3 have been amended without commenting on the merits of these objections. For at least this reason, the objections to claims 2 and 3 should be withdrawn.

C. Response to the Section 112 Rejection of Claim 4

Claim 4 was rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 4 has been amended without commenting on the merits of this rejection. For at least this reason, the rejection of claim 4 should be withdrawn.

D. Response to the Section 102 Rejection of Claims 1-8 and 11-13

The Office Action indicated that claims 1-9 and 11-13 were rejected under 35 U.S.C. § 102(b) as being anticipated by Weiler (see Office Action at page 3, para. 7). The undersigned attorney assumes that claim 9 is not included in this rejection because the Office Action earlier advised the withdrawal of claim 9, and because claim 9 was not addressed in the body of this rejection. Accordingly, the following discussion addresses the rejections of claims 1-8 and 11-13.

The standard for anticipation under Section 102(b) requires that each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. (M.P.E.P. § 2131.) As explained in greater detail below, Weiler cannot support a Section 102 rejection of claims 1-8 and 11-13 for at least the reason that

this reference fails to disclose or suggest each and every element as set forth in the claims.

1. Claim 1 is Directed to a Method for Distributing Electric Power that Includes, *Inter Alia*, Polling a Plurality of Electrical Devices for Power Requests, and Receiving At Least One Power Request From the Plurality of Electrical Devices in Response to the Poll

Independent claim 1 is directed to a method for distributing electric power to a plurality of electrical devices in a vehicle. The method includes, *inter alia*, receiving at least a first operating command for at least one of the plurality of electrical devices, and polling the plurality of electrical devices for power requests in response to receiving the operating command. The method further includes receiving at least one power request from the plurality of electrical devices in response to the poll, and distributing power to the electrical devices based on the at least one power request received from the plurality of electrical devices.

2. Weiler is Directed to a Power System that Distributes Electrical Power Based On the Status of One or More Power Sources and/or the Load in Corresponding Power Line Strands

As Figure 1 of Weiler shows, a plurality of power consuming devices 14-18, 19-22, and 23-26 receive power from sources 80A-80C via power supply strands 1a-1n and corresponding branch line strands 5a-5n, 6a-6n, and 7a-7n, respectively. The electrical power from the branch line strands 5a-5n, 6a-6n, and 7a-7n is distributed to the power consuming devices 14-18, 19-22, and 23-26 via corresponding power allocation units 11, 12, and 13, respectively. A central power control unit 27 is operably connected to each of the power allocation units 11, 12 and 13.

Figure 2 of Weiler illustrates the power control unit 27 and the power allocation unit 11 in more detail. As Weiler states, the individual branch line conductors 5a-5n (shown as "5" in Figure 2) pass through the load sensor 43 and provide electric power to the power switch 42. The load sensor 43 senses the respective load condition on each one of the

branch lines 5a-5n, and provides corresponding output signals via line 53 to the load monitor 40 and via line 54 to the allocation control unit 41. (Weiler in column 4 at lines 56-63.) In operation, the power control unit 27 monitors the loads the branch lines 5a-5n and balances the loads if one exceeds an acceptable range. For example, as Weiler states in column 5 at line 66 to column 6 line 18:

"During operation of the system, the currently present actual load prevailing in each strand 5a-5n of the branch line 5 is measured by the load sensor 43, and the corresponding measured values are conveyed to the load monitor 40 as well as the allocation control unit 41. . . . The allocation control unit compares the load values received from the receiver stage 39 with the load values received from the load sensor 43, and then takes the comparison result into consideration when generating the switching commands for the power switch 42. If the load values measured by the load sensor 43 are within the respectively acceptable range, then the allocations provided by the standard matrix 35 are released for realization in the power switch 42. However, if any particular load value measured by the load sensor 43 exceeds the acceptable load limit, then the power switch 42 will disconnect a respective power consuming device (i.e., the power consuming devices 14-18) from the overloaded power line strand, and instead connect it to a different power line strand" (Words in parentheses added.)

Weiler also discloses a method for reacting to a failure of one or more of the power sources 80A-80C shown in Figure 1. For example, as Weiler states in column 6 at lines 22-34:

"The present apparatus is capable of logically reacting to any malfunction or failure of one or more of the power supply circuits, and thereby largely avoid device failures resulting from a power failure. For example, if the signals provided by the status unit 44 contain information indicating that one power

supply circuit has failed due to failure of the respective power source (i.e., the power sources 80A-80C) or the power line strand, then the selection processor 36 (Figure 2) will determine and generate signals for a new allocation in such a manner that all power consuming devices affected by the power failure will be reallocated and reconnected to the remaining operative power supply circuits" (Words in parentheses added.)

As the foregoing makes clear, Weiler allocates power sources and/or power supply strands based on the status of the power supply sources and/or the measured load in the power supply strands.

3. Weiler Cannot Support a Section 102 Rejection of Claim 1 For At Least the Reason that this Reference Fails to Disclose or Suggest, *Inter Alia*, Polling a Plurality of Electrical Devices for Power Requests, and Receiving At Least One Power Request From the Plurality of Electrical Devices in Response to the Poll

The method of claim 1 includes, *inter alia*, polling a plurality of electrical devices for power requests in response to receiving an operating command from at least one of the electrical devices. Nowhere does Weiler disclose or suggest polling a plurality of electrical devices for power requests – much less polling the electrical devices in response to an operating command from one of the electrical devices. Indeed, as the text and figures of Weiler make clear, the power control unit 27 does not exchange any information directly with any of the power consuming devices (e.g., the power consuming devices 14-18 shown in Figure 2). As Figure 2 of Weiler clearly illustrates, the only devices directly connected to the power consuming devices 14-18 are the power switches 42. The power switches 42, however, do not exchange information with the power consuming devices 14-18. To the contrary, the power switches 42 provide electrical power to the power consuming devices 14-18 via feeder lines 14' – 26'. (See, e.g., Weiler in column 4 at lines 6-12: ". . . the power switches 42 . . . each form a selective interconnection switching junction or means for selectively interconnecting the feeder lines 14' – 26' on the one hand, and the branch line strands 5n-5n . . . on the other hand.") Furthermore, the only device of the power

allocation unit 11 that sends information to the power control unit 27 is the load monitor 40, which processes the load in the individual power strands $5n-5n$ as communicated by the load sensor 43, and then sends these measured values to the load reply signal unit 38 of the power control unit 27. (See, e.g., Weiler in column 6 at lines 4-6.)

Because the power control unit 27 of Weiler does not communicate with the power consuming devices 14-18, the power control unit 27 of Weiler cannot reasonably be construed as "polling the plurality of electrical devices for power requests," as required by claim 1. Accordingly, Weiler cannot support a Section 102 rejection of claim 1 for at least this reason, and the rejection should be withdrawn.

Weiler cannot support a Section 102 rejection of independent claim 1 for at least one additional reason. The method of claim 1 includes receiving at least one power request from the plurality of electrical devices in response to the poll. Nowhere does Weiler disclose or suggest that any of the power consuming devices provide a power request (e.g., the power consuming devices 14-18 shown in Figure 2) in response to a poll. Indeed, the power consuming devices of Weiler cannot respond "to a poll" because the only disclosed connection to an external device is a power connection (i.e., the feeder lines 14'- 18' shown in Figure 2). Therefore, it is unreasonable to suggest that Weiler somehow discloses or suggests electrical devices that provide a power request in response to a poll. Absent this feature, Weiler cannot support a Section 102 rejection of claim 1 for at least this additional reason, and the rejection should be withdrawn.

Claims 2-8 and 11-13 depend from base claim 1. Accordingly, Weiler cannot support a Section 102 rejection of dependent claims 2-8 and 11-13 for at least the reason that this reference cannot support a Section 102 rejection of corresponding base claim 1, and for the additional features of these dependent claims. Therefore, the rejection of dependent claims 2-8 and 11-13 should be withdrawn.

The rejections of dependent claims 2 and 3 should be withdrawn for at least one additional reason. These claims are directed to the method of claim 1, and further state, *inter alia*, that receiving the at least one power request includes receiving a power request having a quantitative component and a qualitative component. As discussed above with regard to the Section 102 rejection of claim 1, Weiler does not disclose receiving any power request from an electrical device – much less a power request "having a quantitative component and a qualitative component." Accordingly, the Section 102 rejections of dependent claims 2 and 3 should be withdrawn for at least this additional reason.

Dependent claims 4-8 and 11-13 include additional features not disclosed or suggested by Weiler. For example, dependent claim 4 is directed to the method of claim 1 and further states, *inter alia*, that receiving the at least one power request includes receiving a first power request from a first appliance and a second power request from a second appliance. In addition, claim 4 states that the first power request includes at least a first need component and the second power request includes a second need component. Claim 4 goes on to state that distributing power to the electrical devices includes distributing power to the first and second appliances based on a comparison of the first need component to the second need component. Nowhere does Weiler disclose or suggest receiving power requests with need components from electrical appliances, or distributing power to the electrical appliances based on a comparison of the need components. Accordingly, Weiler cannot support a Section 102 rejection of dependent claim 4 for at least this additional reason, and the rejection should be withdrawn.

E. New Claims 71-77

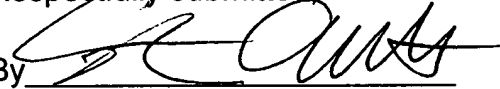
New claims 71-77 have been added by the present response. Applicant respectfully submits that these claims are directed to subject matter disclosed in the present application as filed.

Applicant respectfully requests consideration of the pending application in view of the above.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 50-0665, under Order No. 030048124US from which the undersigned is authorized to draw.

Dated: July 19, 2006

Respectfully submitted,

By 

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